



USDA Foreign Agricultural Service

# GAIN Report

Global Agriculture Information Network

Template Version 2.09

Required Report - public distribution

**Date:** 5/10/2006

**GAIN Report Number:** CI6011

## Chile

## Planting Seeds

## Annual

## 2006

**Approved by:**

Christine M Sloop, Agricultural Attaché  
Office of Agricultural Affairs

**Prepared by:**

Luis Hennicke, Agricultural Specialist

---

**Report Highlights:**

**Another increase in planted area, production, and exports are expected in 2005/6, as large multinational seed companies increase contracts in response to an expected increased demand.**

---

Includes PSD Changes: No  
Includes Trade Matrix: No  
Unscheduled Report  
Santiago [C1]  
[C1]

## Table of Contents

<b>General.....</b>	<b>3</b>
<b>Policy .....</b>	<b>3</b>
General Agricultural Policy.....	3
Planting Seed Production Policy.....	3
Plant Health .....	4
Seed Certification .....	4
Plant Variety Protection.....	4
Variety Approval.....	4
Tariffs.....	4
<b>Production .....</b>	<b>4</b>
<b>Trade.....</b>	<b>5</b>
<b>TABLE - CHILE: Total Seed Imports and Exports.....</b>	<b>6</b>
Field Crops .....	6
Field Crops .....	6
Corn.....	6
Corn.....	6
Sunflower.....	6
Sunflower.....	6
Sugar beet .....	7
Sugar beet .....	7
Beans .....	7
Beans .....	7
Alfalfa.....	7
Alfalfa.....	7
Clover .....	8
Clover .....	8
Fescue.....	8
Fescue.....	8
Bluegrass, Kentucky .....	8
Ryegrass .....	8
Ryegrass .....	8
Other Forages .....	8
Other Forages .....	8
Flowers .....	9
Flowers .....	9
Vegetables .....	9
Vegetables .....	9
Tomato.....	9
Tomato.....	9
Watermelons, Melons .....	10
Watermelons, Melons .....	10
Other Vegetables .....	10
Other Vegetable .....	10

## General

Chile has very good conditions for commercial seed production. Consistently good climatic conditions, farmers with a generally high education level and the absence of diseases and insects are among the factors that have expanded seed production over the last couple decades. A Mediterranean-type climate with mild winters and dry summers covers a great part of central Chile's seed growing areas. Almost all crops and plants grown in temperate climates can be found in this growing area. Chile's geographic isolation has prevented the development of major plant diseases and kept most harmful insects away. It's counter seasonal production with respect to the Northern Hemisphere has helped the country develop a successful commercial seed industry to supply those markets. Seed exports in Chile have grown from US\$70 million in 1995 to over US\$160 million in 2005 and is expected to exceed US\$200 million by 2008. The seed industry benefits from its southern hemisphere location which permits the harvesting and conditioning of seeds and their rapid export to the Northern Hemisphere in time for spring planting, thereby enhancing the quality of germination. Latin American and Asian markets have also been developed over the last few years. Most large multinational seed companies are present in Chile, producing seeds for both the domestic and export markets. They market their products through their own channels of distribution.

## Policy

### General Agricultural Policy

The Ministry of Agriculture enforces strict phytosanitary regulations in order to maintain an environment relatively free of plant pests and diseases, which facilitates the multiplication of seeds. The government does not subsidize the planting seed industry.

### Planting Seed Production Policy

Under a 1991 regulation, the Government of Chile permits imports of genetically modified (GM) seeds for multiplication by the seed industry. When seed companies request an import permit from the Ministry of Agriculture's Agriculture and Livestock Service (SAG), they must provide information about the type of material, the genetic modification incorporated in the material, the quantity, the type of packaging, country of origin, port of entry, commercial use, name of farm, address, botanical characteristics, type of pollination, method of propagation, natural predators, parasites, and methods for protecting bio security. SAG evaluates the risk associated with release on a case-by-case basis and may or may not authorize the import. When an import permit is issued, SAG sets the conditions for handling and safeguarding the material in order to prevent its spread outside of the zones of control. In no case does SAG permit the introduction into Chile of a new transgenic product directly from the laboratory to the field. Currently all seeds propagated from imported transgenic seeds must be re-exported. According to the Seed Producers Association an estimated 45 to 50 percent of the total seed exported is transgenic.

Back in 2002, a national commission was created to review all aspects of Biotechnology. In reference to seed production, the commission report recommended that a legal framework be established for the production, distribution and use of transgenic products. However to date there is still no progress in establishing the framework legislation for commercializing genetically modified seeds within Chile.

## Plant Health

Chile follows the international phytosanitary regulations dictated by the International Plant Protection Convention (IPPC), the European Union and the International Seed Trade Association. To sell seeds to Chile, exporters must meet Chilean phytosanitary requirements. Some species are accepted with a phytosanitary certificate, while others require a certificate and a specific treatment with fungicides and fumigants.

## Seed Certification

No changes have been made to the seed certification process since our last report. Chile's system was accepted by the OECD certification scheme in 1972 and became effective in 1977. In 1980, Chile's certification scheme was accepted as equivalent to the EEC certification regime. The seed certification process is done by SAG. SAG reports that there are a total of 110 protected varieties registered.

## Plant Variety Protection

Chile is a member of U.P.O.V., which stands for Union for the Protection Of new Varieties of plants. The law, which protects varieties, was published in November 1994, allowing Chile to join the U.P.O.V.'s convention of 1978. Variety protection operates through the Registry of Protected Varieties. Varieties created abroad may be registered and enjoy the same rights as Chilean varieties, provided they also have been registered in their country of origin. Acceptance of varieties in the Registry grants the owner the exclusive right to produce and trade the seed.

## Variety Approval

There are no changes since our last report on variety approval. The variety approval system was last modified by Law # 19.342, which was published in November of 1994.

## Tariffs

The import duty for all US seeds is zero since January 2004, as a result of the US-Chile Free Trade Agreement. A 19% value added tax applied to all products (domestic and imported) regardless of origin.

## Production

Chile is a major producer of hybrid corn seeds, sunflower seeds, and vegetable seeds and to a lesser extent forage seeds for export. Production is concentrated south of Santiago in Region VI. Industry sources estimate that large multinational companies present in Chile produce over 80 percent of all seeds. There also are some smaller Chilean seed companies producing under contract for other multinationals that are not present in Chile. Most of these smaller seed companies specialize in the production of seeds of new species and/or varieties. Although seed production in Chile normally follows world demand and supply, that is, when the northern hemisphere is affected by adverse conditions and has a fall in production, companies contract more and increase their output in Chile, a constant expansion in production and trade can be observed during the last few years.

Although there are no official figures on Chile's total area planted for seed production, the Seed Producers' Association reports that plantings totaled a little over 20,000 hectares in 2004/05. Good weather conditions during the growing season and at harvest contributed to a larger output than last year. Official export figures also reflect this increase. Seed production and exports for the 2005/06 season are expected to increase significantly as planted area is estimated to be close to 28,000 hectares. However competition is developing from other southern hemisphere seed producing countries such as Argentina, Australia and New Zealand, which have been growing in seed production and exports, particularly for a variety of horticultural products. Normally over 60 percent of total Chilean seed production is exported.

## Trade

Total seed exports in CY2004 placed Chile as the fifth largest export in the world, after Netherlands, United States, France, Germany and Canada. For the Southern Hemisphere Chile is by far the largest seed exporter. Although seed production in Chile, which is mainly export oriented and is of significant importance in total Chilean agricultural production, these exports do not represent more than 5 percent of total world seed trade. Corn is the most important seed produced and exported by Chile, followed by flowers and melons. Vegetable seeds as a group are also important in total exports, accounting for 25 percent of total exports. Total seed exports rose from US\$150 million in 2003/04 to US\$171 million in 2004/05. Seed imports also rose last year from US\$21 million in 2003/04 to US\$26 million in 2004/05. Most seeds are imported for further multiplication and then re-exported.

The United States and various European countries are Chile's main export markets. Exports to the United States, totaled US\$91.5 million in 2004/05, up from US\$73.9 in 2003/04. The US is by far the primary market for corn seed exports. France is the second largest export market for Chilean seeds with a total of US\$18 million in 2004/05 season.

<b>TABLE - CHILE: Total Seed Imports and Exports</b>					
(July 2004 through June 2005)					
Volume in Kgrs. and Value in Thous. US Dollars					
	<b>Exports</b>			<b>Imports</b>	
	2004/05			2004/05	
<b>Field Crops</b>	<b>Vol.</b>	<b>Val.</b>	<b>Field Crops</b>	<b>Vol.</b>	<b>Val.</b>
<b>Corn</b>			<b>Corn</b>		
U.S.	39,561,966	53,726	Argentina	5,868,397	852
France	8,873,566	11,947	U.S.	703,335	4,222
Germany	3,464,363	6,459	France	153,826	1,247
Netherlands	1,238,487	2,137	Germany	24,690	214
Italy	1,099,105	1,341	Peru	17,727	4
Hungary	389,454	519	Netherlands	14,286	144
Spain	305,817	552	Italy	8,125	74
Japan	242,850	517	Austria	6,917	78
Canada	183,087	274	Canada	4,172	51
Austria	142,410	257	Spain	286	2
Argentina	17,499	92	Brazil	51	0
Falkland	10,030	4	Thailand	45	0
So. Africa	3,128	13	Mexico	22	0
Malaysia	2,400	11	Turkey	12	0
Peru	677	8	South Africa	2	0
Yugoslavia	600	12	TOTAL	6,801,893	6,890
Croatia	450	7			
Turkey	400	1			
Dominican Rep.	395	2			
China	265	2			
Ecuador	250	3			
Uruguay	213	2			
Bolivia	50	1			
Panama	34	0			
TOTAL	55,537,496	77,886			
<b>Sunflower</b>			<b>Sunflower</b>		
Argentina	820,989	1,142	Argentina	355,041	153
France	674,488	1,597	U.S.	7,977	28
U.S.	431,365	1,468	Germany	3,000	5
Spain	313,610	690	Spain	823	5
Japan	29,662	537	Australia	301	5
Denmark	8,186	131	Japan	116	2
Netherlands	1,907	90	Israel	9	1
Bolivia	201	0	Rumania	1	0

Brazil	50	9	TOTAL	373,533	279
TOTAL	2,280,458	5,610			
<b>Sugar beet</b>			<b>Sugar beet</b>		
Belgium	94,251	384	Germany	69,273	2,726
U.S.	43,800	140	France	22,967	959
Germany	43,600	286	Belgium	14,785	428
Denmark	5,787	242	Netherlands	1,679	28
TOTAL	187,438	1,052	Argentina	182	1
			Spain	100	1
			U.S.	22	0
			Denmark	17	0
			Sweden	2	0
			TOTAL	109,027	4,142
<b>Beans</b>			<b>Beans</b>		
Netherlands	1,275,033	2,056	U.S.	156,756	362
U.S.	823,118	1,334	Netherlands	6,279	26
Italy	534,495	658	France	3,628	21
France	263,482	514	Tanzania	1,500	2
Spain	215,622	463	Germany	672	4
Hungary	143,695	293	Spain	596	2
Kenya	65,560	139	Belgium	369	2
Turkey	62,740	135	Japan	15	0
Taiwan	40,000	40	Argentina	2	0
Peru	25,385	44	China	1	0
Egypt	25,000	48	Italy	0	0
Belgium	23,077	73	TOTAL	169,818	418
Germany	20,778	27			
Jordan	20,000	39			
Japan	15,000	29			
Argentina	575	3			
Uruguay	200	1			
Tanzania	100	2			
TOTAL	3,553,860	5,897			
<b>Alfalfa</b>			<b>Alfalfa</b>		
Peru	176,788	686	U.S.	116,147	417
Argentina	72,000	284	Australia	26,002	94
Brazil	29,200	117	Netherlands	12,645	37
Ecuador	5,000	20	TOTAL	154,794	548
Falkland	2,480	1			

TOTAL	285,468	1,108			
<b>Clover</b>			<b>Clover</b>		
Argentina	363,000	837	N. Zealand	74,264	346
Uruguay	77,100	158	Australia	71,004	245
Peru	50,350	108	Argentina	20,200	58
Colombia	20,000	42	U.S.	13,727	2
TOTAL	510,450	1,146	Uruguay	2,500	10
			Canada	1,296	6
			Germany	100	1
			U.K.	2	0
			TOTAL	183,093	668
<b>Fescue</b>			<b>Fescue</b>		
Peru	1,000	2	U.S.	81,547	128
TOTAL	1,000	2	Netherlands	31,816	93
			Denmark	13,388	22
			Canada	5,137	7
			France	2,500	12
			N. Zealand	0	0
			TOTAL	134,388	262
			<b>Bluegrass, Kentucky</b>		
			U.S.	14,958	37
			Canada	2,614	6
			TOTAL	17,572	43
<b>Ryegrass</b>			<b>Ryegrass</b>		
South Africa	25,980	31	N. Zealand	499,680	1,092
Peru	56,500	68	Denmark	140,015	239
Australia	50,000	47	Netherlands	117,660	271
Netherlands	46,925	62	U.S.	27,539	56
Germany	19,900	25	Australia	12,000	20
TOTAL	199,305	232	U.K.	9,001	22
			Canada	2,023	4
			Czech Rep.	2,000	5
			France	1,500	5
			TOTAL	811,418	1,712
<b>Other Forages</b>			<b>Other Forages</b>		
Israel	88,000	33	N. Zealand	75,625	269
Peru	28,460	48	U.S.	37,014	120



Colombia	9,250	8	Denmark	19,026	26
Ecuador	7,500	7	Australia	9,999	29
U.S.	2,291	38	U.K.	9,000	21
Falkland	140	1	France	6,964	18
France	100	0	Netherlands	1,240	3
U.K.	100	1	TOTAL	158,868	485
TOTAL	135,841	136			
<b>Flowers</b>			<b>Flowers</b>		
Japan	6,787	2,411	Netherlands	19,350	132
Germany	6,746	855	France	2,181	78
U.S.	5,475	2,726	Brazil	900	20
Netherlands	4,836	1,924	U.S.	504	102
U.K.	1,271	679	Italy	496	26
Denmark	307	1,292	Spain	474	27
Canada	49	2	Germany	89	6
France	40	5	Denmark	83	7
Italy	32	32	Japan	55	31
TOTAL	25,543	9,925	So. Africa	7	0
			N. Zealand	1	5
			U.K.	1	1
			TOTAL	24,141	435
<b>Vegetables</b>			<b>Vegetables</b>		
<b>Tomato</b>			<b>Tomato</b>		
U.S.	5,402	1,637	China	1,783	1,098
Netherlands	2,578	1,304	France	408	640
Germany	2,100	10	U.S.	370	360
France	1,308	513	Thailand	210	179
Colombia	618	57	Mexico	171	324
Venezuela	546	60	Netherlands	113	858
Brazil	511	121	Brazil	75	118
Argentina	323	99	Israel	69	353
Spain	188	123	Spain	42	29
Japan	159	39	Canada	36	7
Peru	104	14	Peru	18	20
Bolivia	100	12	Japan	17	4
Uruguay	7	26	Philippines	14	8
Ecuador	2	10	Bolivia	5	29
Cuba	2	9	Guatemala	3	4
TOTAL	13,948	4,032	Italy	2	1
			Argentina	1	0

			Morocco	1	0
			TOTAL	3,338	4,033
<b>Watermelons, Melons</b>			<b>Watermelons, Melons</b>		
U.S.	58,122	6,414	Peru	2,640	563
Netherlands	4,883	727	U.S.	2,481	195
Venezuela	3,914	91	Mexico	307	86
Brazil	3,883	556	Netherlands	288	138
Spain	3,865	463	Taiwan	232	68
Colombia	2,084	178	France	190	15
France	1,523	343	China	135	41
Japan	431	70	Brazil	91	162
Argentina	241	118	Thailand	51	14
Ecuador	142	4	Israel	29	9
Peru	53	15	Spain	16	3
Bolivia	17	3	Japan	5	4
Israel	1	0	Argentina	2	0
TOTAL	79,159	8,981	Italy	1	0
			Ecuador	0	0
			TOTAL	6,468	1,296
<b>Other Vegetables</b>			<b>Other Vegetable</b>		
U.S.	358,919	24,068	U.S.	178,422	1,865
France	183,972	3,315	Argentina	30,056	735
Japan	126,275	3,162	U.K.	17,002	27
Netherlands	122,771	8,084	Denmark	16,394	127
Brazil	96,565	791	Netherlands	13,628	420
Italy	88,536	599	Thailand	12,038	12
Peru	20,936	3,187	Hungary	9,500	87
Argentina	17,842	243	France	5,413	293
Hungary	14,682	57	So. Africa	4,321	130
Denmark	13,299	180	Israel	3,568	131
Colombia	7,417	410	Peru	2,915	450
So. Korea	7,253	217	Japan	1,540	283
Germany	5,809	111	Spain	1,295	54
Uruguay	5,150	42	Brazil	1,243	170
Spain	5,063	753	Germany	977	5
Venezuela	4,289	521	Mexico	797	81
Ecuador	3,980	8,420	Slovenia	338	8
Haiti	3,011	49	N. Zealand	318	20
Bolivia	2,058	69	Australia	269	26
Greece	1,243	70	Italy	174	5

So. Africa	1,238	10	China	99	59
India	1,221	17	Vietnam	69	121
U.K.	676	11	Taiwan	54	7
Australia	313	140	So. Korea	39	9
Honduras	230	4	Belgium	28	4
El Salvador	206	3	Bolivia	3	1
Guatemala	129	2	India	2	0
New Zealand	123	2	Ecuador	1	0
Belgium	90	0	TOTAL	300,503	5,131
Thailand	32	5			
Turkey	15	8			
Czech Rep.	8	3			
Mexico	2	5			
TOTAL	1,093,353	54,557			